M0350026
TASK 2868
cc Leslie 0002

Geneva Rock Products ▪ 1565 West 400 North ▪ Orem, Utah 84059

February 3, 2009

Paul Baker, Environmental Manager, Minerals Program
Division of Oil, Gas and Mining
1594 W. North Temple, Suite 1210
PO Box 145801
Salt Lake City, Utah 84114-5801

Subject: Response to Request for Additional Information, Geneva Rock Products, Point of the Mountain Quarry, M/035/0026, Salt Lake County, Utah.

Dear Mr. Baker:

Following are responses to the requests in the December 1, 2008 letter from the Division to Mr. Carl Clyde.

1. Zoning.
Geneva is in contact with Draper City and a resolution to any outstanding issues is pending.

2. Air Quality.
The latest approval order (AO) from the Division of Air Quality has been added to Appendix H. A list of BACT to be used, taken from the AO, has been inserted in Section 107 of the NOI.

3. Blasting and Vibration.
   a. What are the results in inches per second of vibration monitoring, and what were the trigger limits of the sensors?
   Monitoring was conducted by Wolfe Management Group, a drilling and blasting contractor out of Payson. Trigger limits were set at 0.05 inches per second.

   b. Where were monitors placed?
   Monitors were set at the second to last house on both sides of Steep Mountain Drive. The location of these houses is shown on the map at the end of this letter. Test results found vibrations ranging from 0.15 to 0.23 inches per second.

   c. Have any of the home sites that have noted vibration been monitored?
   Yes. One of the two houses monitored was the residence of a gentleman who had contacted Geneva concerned about the level of vibrations. The location of these houses relative to the mine is shown on the map at the end of this letter.

The table below is taken from Newmont Gold's blasting vibration webpage for the Waihi Gold Mine in New Zealand (website at http://www.newmont.com/en/operations/australianz/waihigold/environment/vibration/index.asp). It shows that a sliding door typically produces about 0.4 inches of vibration per second, which is about twice as much as was generated at the two houses monitored during the blast.

Household Activity	Vibration Level in inches/second peak particle velocity
Jumping	9.8
Heel drop	5.9
Nail hammering	3.9
Walking	1.6
Shutting door	1.2
Sliding door	0.4

Please see the revised text (enclosed) for language showing how Geneva will conduct long term monitoring to track and assure blasting safety, with minimal noise, vibration, etc. as mining progresses through the quarry.

4. Concurrent Reclamation.

Geneva spent almost $500,000.00 on reclamation work in 2008. Work included tree planting and construction of pre-formed concrete walls between Minuteman Drive and Geneva's facilities. The work runs from Geneva's fuel farm on the south to its asphalt plant on the north, and is just visible on the enclosed map, if enlarged to about 150 percent. The goal of this reclamation was to block wind, reduce off-site dust, and improve aesthetics. Geneva has also paved all long-term road areas within the quarry to limit fugitive dust, and an updated FDCP was submitted to the DAQ and approved in May, 2008 (see question 2 above).

Geneva currently utilizes all affected lands. The only land marked as "reclaimed" on Geneva's maps is an area due east of the asphalt plant, against the east boundary of the property. This land is already reclaimed – it is not pending reclamation. Currently there are no areas available for concurrent reclamation, although the mine commits to an annual review of the mine to determine the feasibility of reclaiming portions of the quarry based on mining locations, future plans, and the yearly progression of mining.

5. Slope Stability.

The quarry maintains 2H:1V slopes in ledge rock. This meets DOGM rules at RS647-4-111.7. These slopes have been shown to be stable through the history of mining at Point of the Mountain. The closest buildings to the quarry are more than 600 horizontal feet away from the closest point of Geneva's property; currently the distance from active mine areas to houses in much further (see Map 1). These distances provide adequate buffer from the highly unlikely occurrence of slope sloughing. In addition, Geneva inspects its highwalls and working faces for signs of weakness or stress on a daily basis to assure the safety of Geneva workers. Any sign of highwall or slope instability would be removed immediately via blasting and/or excavating.

A surety for $938,346.00 was submitted to DOGM on January 15, 2009 under separate cover. A pdf of this document is enclosed.

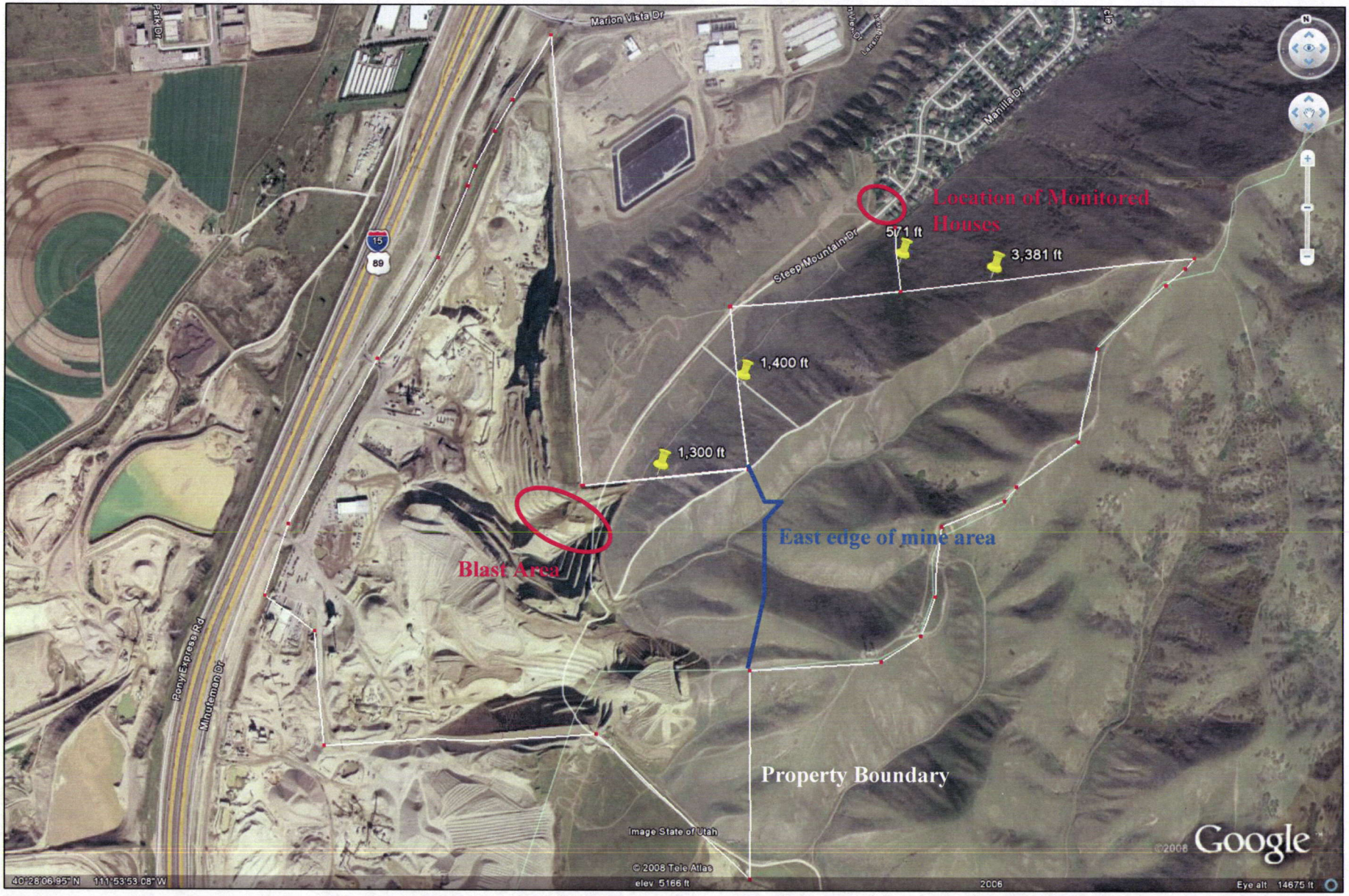
Geneva believes that the responses above and the enclosed revised pages address the Division's concerns. Thank you for the opportunity to respond to these comments.

Sincerely,

Mike Edwards
By M Sawyer

Mike Edwards

encl: map of blast area, pdf of surety bond, revised text pages
xc: Tony Christofferson - Geneva Rock Products
Linda Matthews - JBR Consultants



Map 1: Map of Geneva's Point of the Mountain estimated property boundary (white line), with blast location and location of houses monitored during this blast shown (red circles). Map also shows eastward limit of mining under current mining revision package (blue line), which is roughly 1400 feet south and east of the closest house locations.

Bond Number [redacted]
Surety NAIC No
Permit Number M/035/026
Mine Name South Hansen Quarry

ATTACHMENT A
To
RECLAMATION CONTRACT
BETWEEN PRINCIPAL AND DIVISION

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
Division of Oil, Gas and Mining
1594 West North Temple Suite 1210
Box 145801
Salt Lake City, Utah 84114-5801
Telephone: (801) 538-5291
Fax: (801) 359-3940

THE UTAH MINED LAND RECLAMATION ACT

SURETY BOND

* *

The undersigned Geneva Rock Products, Inc, as Principal, a Corporation organized under the laws of the State of Utah and Travelers Casualty & Surety Company of America, as Surety, a Corporation organized under the laws of the State of Connecticut, hereby jointly and severally bind ourselves, our heirs, administrators, executors, successors, and assigns, jointly and severally, unto the State of Utah, Division of Oil, Gas and Mining ("Division")
and _____
(other agency, if any) in the penal sum of Nine Hundred Thirty-Eight Thousand Three Hundred Fourth-Six and no/100 dollars ($ 938,346.00)

This Surety Bond is provided to secure the obligations of the Principal, as set forth by the terms and conditions of the Reclamation Contract, and any addendums thereto, to reclaim lands that will be affected by mining operations as identified in the Notice of Intention received, or approved if applicable, by the Division on the 8th day of January, 20 09 .

The lands that are covered by this Surety Bond are the Lands Affected by mining operations as defined and described in the above Notice, and the Mining and Reclamation Plan if required, subject to terms and conditions of the Reclamation Contract.

Bond Number
Surety NAIC No
Permit Number M/035/026
Mine Name South Hansen Quarry

Notice and has faithfully performed all requirements of the Mined Land Reclamation Act, and complied with the Rules and Regulations adopted in accordance therewith, then this obligation shall be void; otherwise it shall remain in full force and effect Failure of the Principal to fulfill the obligations specified by the Mined Land Reclamation Act and the Rules adopted there under, and in accordance with the specification of the Principal's Mining and Reclamation Plan or Notice, may result in forfeiture of this bond in accordance with the applicable statutes and regulations

If the Mining and Reclamation Plan or Notice provides for periodic partial reclamation of the lands affected, and if the lands are reclaimed in accordance with such Plan or Notice, Act and regulations, then Principal may apply for a reduction in the amount of this Surety Bond. In the converse, if the Mining and Reclamation Plan or Notice provides for a gradual increase in the lands affected or the extent of disturbance, then, the Division may require that the amount of this Surety Bond be increased, with the written approval of the Surety. The amount of reclamation surety may also be adjusted as a result of a periodic review by the Division, which shall take into account inflation/deflation based upon an acceptable Costs Index, or at the request of the operator.

This bond may be canceled by Surety after ninety (90) days following receipt by the Division and Principal of written notice of such cancellation Written notice to the Division and Principal as required by this paragraph shall be provided by certified mail or by a courier service that provides proof of delivery by signature of the recipient Surety's liability shall then, at the expiration of said ninety (90) days, cease and terminate except that Surety will remain fully liable for all reclamation obligations of the Principal incurred prior to the date of termination

Principal and Surety and their successors and assigns agree to guarantee said obligation and to indemnify, defend, and hold harmless the Division from any and all expenses (including attorney fees) which the Division may sustain in the collection of sums due hereunder.

Surety will give prompt notice to Principal and to the Division of the filing of any petition or the commencement of any proceeding relating to the bankruptcy, insolvency, reorganization, or adjustment of the debts of Surety, or alleging any violation or regulatory requirements which could result in suspension or revocation of the Surety's license to do business.

Surety is licensed to do business in Utah and is rated by A M Best as A- or better or rated as having Financial Performance Rating (FPR) of 8 or better, and is listed in the U S. Department of Treasury's Circular "570." Upon incapacity of the Surety by reason of bankruptcy, insolvency, or suspension or revocation of its license, or upon failure to maintain the A. M. Best or FPR rating and listing on Circular "570", Principal shall be without adequate bond coverage as required by the Division and shall have 120 days after notice to replace the bond with other bonds acceptable to the Division. If the Principal does not replace this surety bond as required, the Division may order cessation of mining operations and commence actions to enforce its rights against the Surety. The Surety's liability shall continue and the Surety will remain fully liable for all reclamation obligations of the Principal incurred until this surety bond is forfeited, or the conditions of this obligation have been satisfied

Bond Number [redacted]
Surety NAIC No [redacted]
Permit Number M/035/026
Mine Name South Hansen Quarry

IN WITNESS WHEREOF, the Principal and Surety hereunto set their signatures and seals as of the dates set forth below

Geneva Rock Products, Inc
Principal (Permittee)

Al Schellenberg, President
By (Name and Title typed):

A T Schellenberg
Signature

1-15-09
Date

Surety Company

Travelersn Casualty & Surety Company of America
Surety Company Name

302 West 5400 South, #101
Street Address

W. Douglas Snow
Surety Company Officer

Murray, Utah 84107
City, State, Zip

Attorney-In-Fact
Title/Position

801-685-6860
Phone Number

W. Douglas Snow
Signature

January 8th, 2009
Date

Bond Number [redacted]
Surety NAIC No [redacted]
Permit Number M/035/026
Mine Name South Hansen Quarry

SO AGREED this _____ day of _____, 20 ____

AND APPROVED AS TO FORM AND AMOUNT OF SURETY:

_____
John R Baza, Director
Utah State Division of Oil, Gas and Mining

*NOTE: Where one signs by virtue of Power of Attorney for a Surety, such Power of Attorney must be filed with this bond If the Operator is a corporation, the bond shall be executed by its duly authorized officer.

STATE OF UTAH }
}ss:
COUNTY OF SALT LAKE }

W. DOUGLAS SNOW being first sworn, on oath and deposes and says, that he is the attorney-in-fact of TRAVELERS CASUALTY AND SURETY COMPANY OF AMERICA, and that he is duly authorized to execute and deliver the forgoing obligation; that said Company is authorized to execute the same, and has complied in all respects with the laws of Utah in reference to becoming sole surety upon bonds, undertakings and obligation.

302 West 5400 South, Suite 101
Murray, Utah 84107

Subscribed and sworn to before me, this **8th** day of **January, 2009**

Florence Christensen
Notary Public

My Commission Expires: 3/29/09

FLORENCE CHRISTENSEN
NOTARY PUBLIC • STATE of UTAH
2911 W. DIMOND DRIVE
WEST JORDAN, UT 84084
COMM. EXPIRES 3-29-2009

WARNI IIS POWER OF ATTORNEY IS INVALID WITHOUT THE REL JER

TRAVELERS

POWER OF ATTORNEY

Farmington Casualty Company
Fidelity and Guaranty Insurance Company
Fidelity and Guaranty Insurance Underwriters, Inc.
Seaboard Surety Company
St. Paul Fire and Marine Insurance Company
St Paul Guardian Insurance Company
St. Paul Mercury Insurance Company
Travelers Casualty and Surety Company
Travelers Casualty and Surety Company of America
United States Fidelity and Guaranty Company

Attorney-In Fact No 219509 **Certificate No** _____

KNOW ALL MEN BY THESE PRESENTS: That Seaboard Surety Company is a corporation duly organized under the laws of the State of New York that St Paul Fire and Marine Insurance Company, St Paul Guardian Insurance Company and St Paul Mercury Insurance Company are corporations duly organized under the laws of the State of Minnesota that Farmington Casualty Company. Travelers Casualty and Surety Company, and Travelers Casualty and Surety Company of America are corporations duly organized under the laws of the State of Connecticut that United States Fidelity and Guaranty Company is a corporation duly organized under the laws of the State of Maryland that Fidelity and Guaranty Insurance Company is a corporation duly organized under the laws of the State of Iowa, and that Fidelity and Guaranty Insurance Underwriters, Inc is a corporation duly organized under the laws of the State of Wisconsin (herein collectively called the Companies) and that the Companies do hereby make constitute and appoint

W Douglas Snow, D Cory Payne, James H Dickson, Randall J Austin Aaron Griffith, Mark J Austin, Susan R. Smith, and Barbara J Carter

of the City of Murray State of Utah their true and lawful Attorney(s)-in-Fact, each in their separate capacity if more than one is named above to sign execute seal and acknowledge any and all bonds recognizances conditional undertakings and other writings obligatory in the nature thereof on behalf of the Companies in their business of guaranteeing the fidelity of persons guaranteeing the performance of contracts and executing or guaranteeing bonds and undertakings required or permitted in any actions or proceedings allowed by law

IN WITNESS WHEREOF the Companies have caused this instrument to be signed and their corporate seals to be hereto affixed this 31st day of July 2008

Farmington Casualty Company
Fidelity and Guaranty Insurance Company
Fidelity and Guaranty Insurance Underwriters, Inc.
Seaboard Surety Company
St. Paul Fire and Marine Insurance Company
St. Paul Guardian Insurance Company
St. Paul Mercury Insurance Company
Travelers Casualty and Surety Company
Travelers Casualty and Surety Company of America
United States Fidelity and Guaranty Company

State of Connecticut
City of Hartford ss

By: _____
George W Thompson Senior Vice President

On this the 31st day of July 2008, before me personally appeared George W Thompson who acknowledged himself to be the Senior Vice President of Farmington Casualty Company Fidelity and Guaranty Insurance Company Fidelity and Guaranty Insurance Underwriters Inc Seaboard Surety Company St Paul Fire and Marine Insurance Company, St Paul Guardian Insurance Company St Paul Mercury Insurance Company Travelers Casualty and Surety Company Travelers Casualty and Surety Company of America and United States Fidelity and Guaranty Company, and that he as such being authorized so to do executed the foregoing instrument for the purposes therein contained by signing on behalf of the corporations by himself as a duly authorized officer

In Witness Whereof, I hereunto set my hand and official seal
My Commission expires the 30th day of June, 2011

MARIE C. TETREAULT NOTARY PUBLIC CONNECTICUT

_____
Marie C Tetreault, Notary Public

58440-5-07 Printed in U.S.A

WARNING: THIS POWER OF ATTORNEY IS INVALID WITHOUT THE RED BORDER

WARNIN IS POWER OF ATTORNEY IS INVALID WITHOUT THE RED ER

This Power of Attorney is granted under and by the authority of the following resolutions adopted by the Boards of Directors of Farmington Casualty Company, Fidelity and Guaranty Insurance Company Fidelity and Guaranty Insurance Underwriters. Inc Seaboard Surety Company St Paul Fire and Marine Insurance Company. St Paul Guardian Insurance Company St Paul Mercury Insurance Company Travelers Casualty and Surety Company Travelers Casualty and Surety Company of America and United States Fidelity and Guaranty Company which resolutions are now in full force and effect reading as follows:

RESOLVED that the Chairman the President any Vice Chairman any Executive Vice President any Senior Vice President any Vice President any Second Vice President the Treasurer any Assistant Treasurer the Corporate Secretary or any Assistant Secretary may appoint Attorneys-in-Fact and Agents to act for and on behalf of the Company and may give such appointee such authority as his or her certificate of authority may prescribe to sign with the Company s name and seal with the Company's seal bonds, recognizances. contracts of indemnity and other writings obligatory in the nature of a bond, recognizance, or conditional undertaking and any of said officers or the Board of Directors at any time may remove any such appointee and revoke the power given him or her; and it is

FURTHER RESOLVED, that the Chairman the President any Vice Chairman. any Executive Vice President. any Senior Vice President or any Vice President may delegate all or any part of the foregoing authority to one or more officers or employees of this Company provided that each such delegation is in writing and a copy thereof is filed in the office of the Secretary; and it is

FURTHER RESOLVED that any bond recognizance. contract of indemnity or writing obligatory in the nature of a bond, recognizance, or conditional undertaking shall be valid and binding upon the Company when (a) signed by the President any Vice Chairman any Executive Vice President any Senior Vice President or any Vice President any Second Vice President. the Treasurer any Assistant Treasurer the Corporate Secretary or any Assistant Secretary and duly attested and sealed with the Company s seal by a Secretary or Assistant Secretary; or (b) duly executed (under seal, if required) by one or more Attorneys-in-Fact and Agents pursuant to the power prescribed in his or her certificate or their certificates of authority or by one or more Company officers pursuant to a written delegation of authority; and it is

FURTHER RESOLVED. that the signature of each of the following officers: President any Executive Vice President any Senior Vice President any Vice President, any Assistant Vice President, any Secretary any Assistant Secretary, and the seal of the Company may be affixed by facsimile to any power of attorney or to any certificate relating thereto appointing Resident Vice Presidents Resident Assistant Secretaries or Attorneys-in-Fact for purposes only of executing and attesting bonds and undertakings and other writings obligatory in the nature thereof and any such power of attorney or certificate bearing such facsimile signature or facsimile seal shall be valid and binding upon the Company and any such power so executed and certified by such facsimile signature and facsimile seal shall be valid and binding on the Company in the future with respect to any bond or understanding to which it is attached

I, Kori M Johanson the undersigned, Assistant Secretary, of Farmington Casualty Company Fidelity and Guaranty Insurance Company, Fidelity and Guaranty Insurance Underwriters Inc Seaboard Surety Company. St Paul Fire and Marine Insurance Company, St Paul Guardian Insurance Company, St Paul Mercury Insurance Company Travelers Casualty and Surety Company Travelers Casualty and Surety Company of America, and United States Fidelity and Guaranty Company do hereby certify that the above and foregoing is a true and correct copy of the Power of Attorney executed by said Companies which is in full force and effect and has not been revoked

IN TESTIMONY WHEREOF I have hereunto set my hand and affixed the seals of said Companies this 8th day of January 2009

Kori M Johanson, Assistant Secretary

To verify the authenticity of this Power of Attorney, call 1-800-421-3880 or contact us at www travelersbond com Please refer to the Attorney-In-Fact number, the above-named individuals and the details of the bond to which the power is attached

Form MR-REV-att (DOGM – Revise/Amend Change Form)
(Revised September 14, 2005)

Application for Mineral Mine Plan Revision or Amendment

Operator: GENEVA ROCK PRODUCTS	
Mine Name: POINT OF THE MOUNTAIN	File Number: M/ 035/036

Provide a detailed listing of all changes to the mining and reclamation plan that will be required as a result of this change. Individually list all maps and drawings that are to be added, replaced, or removed from the plan. Include changes of the table of contents, section of the plan, pages, or other information as needed to specifically locate, identify and revise or amend the existing Mining and Reclamation Plan. **Include page, section and drawing numbers as part of the description.**

DETAILED SCHEDULE OF CHANGES TO THE MINING AND RECLAMATION PLAN
DESCRIPTION OF MAP, TEXT, OR MATERIALS TO BE CHANGED

☐ Add	☒ Replace	☐ Remove	Cover Page with new Cover Page
☐ Add	☒ Replace	☐ Remove	Existing Page 19 with Revised Page 19
☒ Add	☐ Replace	☐ Remove	Page 19A
☐ Add	☒ Replace	☐ Remove	Existing Page 26 with Revised Page 26
☒ Add	☐ Replace	☐ Remove	Page 26A
☐ Add	☒ Replace	☐ Remove	Existing Page 34 with Revised Page 34
☒ Add	☐ Replace	☐ Remove	Page 35
☐ Add	☒ Replace	☐ Remove	Appendix H – Existing AQ Approval Order with new Approval Order dated May 7, 2008
☐ Add	☐ Replace	☐ Remove	
☐ Add	☐ Replace	☐ Remove	

I hereby certify that I am a responsible official of the applicant and that the information contained in this application is true and correct to the best of my information and belief in all respects with the laws of Utah in reference to commitments and obligations, herein.

Mike Edwards
Print Name

Sign Name, Position

Date

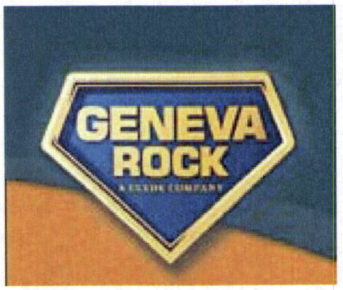
Return to:
State of Utah
Department of Natural Resources
Division of Oil, Gas and Mining
1594 West North Temple, Suite 1210
Box 145801
Salt Lake City, Utah 84114-5801

Phone: (801) 538-5291 Fax: (801) 359-3940

O \FORMS\MR-REV-att doc

FOR DOGM USE ONLY:
File #: M/ /
Approved:
Bond Adjustment: from ($) **to $**

Notice of Intention
to
Commence Large Mining Operations
Geneva Rock Products, Inc.
Point of the Mountain Quarry Operation
M/035/026



Submitted by:

Geneva Rock Products, Inc.
1565 West 400 North
P.O. Box 538
Orem, Utah 84059

to:

Utah Division of Oil, Gas and Mining
1594 West North Temple, Suite 1210
Salt Lake City, Utah 84114-5801

Prepared with the assistance of:

JBR Environmental Consultants, Inc.
8160 S. Highland Drive
Sandy, Utah 84093

(801) 943-4144

November 15, 2005

Revised March 10, 2006; November 17, 2006; February 22, 2007; April 25, 2007; May 2008;
Submitted for Final Approval November 2008, Revised January 2009

- The property boundary is fenced with T-post and 4 foot wire fence topped by 2 strands of barbed wire.

Erosion Control

Erosion Control will be accomplished during operations as detailed in Section VI with the goals of minimizing soil loss from topsoil stockpiles, and minimizing offsite sedimentation.

Deleterious or Acid-forming Materials

As discussed above in section 106.4, deleterious or acid-forming materials are not expected to be encountered during the mining and milling operations.

GRP is considered a small generator of hazardous waste by the U.S. Environmental Protection Agency and the Utah Division of Solid and Hazardous Waste, and is permitted as such.

Soils

As previously described, any available suitable soil material will be salvaged from the remaining areas to be developed and made available for ongoing reclamation.

Air Quality

A Utah Division of Air Quality Approval Order was approved May 7, 2008 and is included in Appendix H. This Approval Order requires that Geneva follow Best Available Control Technology (BACT) to minimize fugitive dust emissions. To summarize the approved BACT measures to be used:

- ➔ Fugitive Dust will be controlled by wet suppression methods:
  - water sprays will be used on all crusher inlet and outlet points, all dry screens, and all conveyor transfer and stacker drop points; with the use of water trucks;
  - by washing and sweeping of the haul road,
  - paving where appropriate,
  - prompt removal of debris
  - restricting vehicle speeds in and around operations areas
  - using wind breaks to cut air flow
  - reclamation of disturbed areas.

- ➔ Baghouses and bin-vent control devices will be used for asphalt and concrete plan exhaust points, and cement, lime, and flyash storage silos associated with these plants.
- ➔ The truck batch plant will use a hood covering the truck inlet when loading concrete trucks, and hood exhaust will pass through a bin-vent prior to being vented to the atmosphere.

The approved FDCP is included in Appendix A of the Air Quality Approval Order.

Concurrent Reclamation

There are no large areas planned for concurrent reclamation (reclamation through topsoiling and seeding). However, Geneva will review annually its affected lands and will consider reclaiming portions of the permit area, depending on current and future mining plans and progressions.

Geneva spent almost $500,000.00 on reclamation and stabilization work in 2008. Work included tree planting and construction of pre-formed concrete walls between Minuteman Drive and Geneva's facilities. The work runs from Geneva's fuel farm on the south to its asphalt plant on the north. The goal of this reclamation was to block wind, reduce off-site dust, and improve aesthetics. Geneva has also paved all long-term road areas within the quarry to limit fugitive dust, and an updated FDCP was submitted to the DAQ and approved in May, 2008.

Areas disturbed under this notice that are not routinely or currently used are kept in a safe, environmentally stable condition. Noxious weeds on the Salt Lake, Utah County, and State of Utah Noxious Weeds lists will be monitored for, and aggressively treated, if present on these disturbed sites.

Deleted: GRP will conduct concurrent reclamation where practical.

Deleted: will be

V. R647-4-108 Hole Plugging Requirements

All exploration holes drilled by GRP have been plugged according to the requirements of R647-4-108. Future drill holes, should there be any, would be plugged according to the same requirements. Drill holes would not be left unplugged for more than 30 days unless approved by UDOGM. GRP has several water wells in the project vicinity, as shown on Figure 4 and in Table 3. One of these (#9) has stopped producing water, and plans are underway to drill a new well nearby. The dry well will be plugged according to the requirements of the Utah State Engineer.

During final reclamation, runoff from the operations east of the highway will still continue to the retention ponds area, where it will spread and provide support to the reclaimed vegetation.

Air Quality

Salt Lake County is a Non-attainment area for PM_{10} and SO_2 and is a Maintenance area for Ozone under the National Ambient Air Quality Standards (NAAQS). Utah County is a Non-attainment area for PM_{10}. New Source Performance Standards apply to this source. This is a Title V area source under the 1990 Clean Air Act. Currently permitted emissions for the POM pit (as per Approval Order) are included in Table 6.

Table 6. Potential to Emit (PTE) Emissions at POM Quarry

Pollutant	PTE Emissions in tons/yr.
PM_{10}	128.86
NO_x	65.58
SO_2	25.93
CO	111.98
VOC	20.94
HAPs	4.42

GRP operates within the limitations and conditions of the air quality Approval Order DAQE-AN0105650014-08.

GRP abides by a Fugitive Dust Control Plan acceptable to State of Utah Department of Environmental Quality for control of all dust sources associated with POM quarry operations.

Public Health & Safety

All operations would be conducted in compliance with applicable MSHA safety regulations. Some health and safety measures that would be employed are outlined in Section IV above. In addition, the following would be implemented:

1. Access to the processing facility would be controlled by fencing and signed with *No Trespassing* and *Warning* signs. Signs would also be posted and maintained at all access points to the open pit.

2. Blasting practices would be conducted in accordance with state and federal rules and in a manner to prevent fly rock outside the property limits and to assure compliance with the dust opacity limitations of the Division of Air Quality.

   Geneva's largest blast in recent memory was was monitored to address citizen concerns about blasting noise and vibration. The monitoring was conducted by Wolfe Management Group, a drilling and blasting firm out of Payson, UT. Trigger limits of the monitors used were set at 0.05

inches per second. Monitors were set at the last house and the second to last house on Steep Mountain Drive, the latter being the residence of a gentleman who had contacted Geneva concerned about the level of vibrations. Test results found vibrations ranging from 0.15 to 0.23 inches per second.

The table below is taken from Newmont Gold's blasting vibration webpage for the Waihi Gold Mine in New Zealand (Newmont Gold 2006). It shows that a sliding door typically produces about 0.4 inches of vibration per second, which is about twice as much as was generated at the two houses monitored during the blast. Geneva believes this data indicates that vibration and associated noise are within acceptable limits.

Household activity	Vibration level (inches/second peak particle velocity)
jumping	up to 9.8
heel drop	up to 5.9
nail hammering	up to 3.9
walking	up to 1.6
shutting door	up to 1.18
sliding door	up to 0.4

However, to assure this is the case, Geneva commits maintaining standard blasting records of each blast, including the pounds of explosives used per 8 millisecond delay. if further complaints are registered, the next scheduled blast will be monitored. If vibrations on a monitored blast exceed 0.35 inches per second, the number of holes, blasting patterns, delays used, and the weight of explosives used will be reviewed and adjusted as necessary to minimize the detrimental effects of blasting on our neighbors.

References

Biek, Robert F. 2003. Interim Geologic Map of the Jordan Narrows Quadrangle, Salt Lake and Utah Counties, Utah. 8-5-03. STATEMAP Agreement No. 02HQAG005. Utah Geological Survey Open-File Report 415. Utah Geological Survey, Utah Department of Natural Resources, in cooperation with U.S. Geological Survey.

Bighorn Archaeological Consultants, LLC. 2005. Class III Cultural Resource Inventory of the Proposed Geneva Rock Gravel Pit Extension, Salt Lake and Utah Counties, Utah. State Project Authorization Number U05-HO-1080p.

Geneva Rock Products, Inc. October 2002. Drinking Water Source Protection Plan for Protection of Geneva Rock's No. 11 Well.

Natural Resource Conservation Service (NRCS). 2002. Non Technical Soil Description (NASIS derived) of Soil Survey Area UT612, Salt Lake Area, Utah, as of 3/7/2002.

Natural Resource Conservation Service (NRCS). 1999. Non Technical Soil Description (NASIS derived) of Soil Survey Area UT621, Utah County, Utah, Central Part as of 5/24/1999.

Newmont Gold. 2006. Waihi Gold: Vibration, and Blast Vibration Response. http://www.newmont.com/en/operations/australianz/waihigold/environment/vibration/index.asp. Accessed January 2009.

Pitcher, Grant G. 1957. The Geology of the Jordan Narrows Quadrangle, Utah: Unpublished Masters Thesis, Brigham Young University.

Utah Administrative Code R647-4. Large Mining Operations. As in effect January 1, 2003.

Utah Conservation Data Center (UCDC). 2005. Vertebrate Animals database. Utah Department of Natural Resources, Division of Wildlife Resources. http://dwrcdc.nr.utah.gov/rsgis2/Search/SearchVerts.asp. Accessed October 2005.

Utah Department of Natural Resources. 1971. Summary of Water Resources of Salt Lake County, Utah. Technical Publication No. 34.

Utah Division of Water Rights. 2005. Water Rights Database found at http://nrwrt1.nr.state.ut.us/cgi-bin/wrprint.exe?Startup. Accessed October 2005.

Utah Division of Wildlife Resources. 2005. Email correspondence from Sarah Lindsey, Database Technician, Utah Natural Heritage Program. Dated October 13, 2005.

U.S. Fish and Wildlife Service (USFWS). 2005. Letter from Henry R. Maddox, Utah Field Supervisor, Utah Field Office, West Valley City, Utah. Regarding POM Quarry Operation, Geneva Rock Expansion (FWS/R6/ES/UT/05-1317). Dated October 3, 2005.

Appendix H
Utah Division of Air Quality Approval Order

State of Utah

Department of
Environmental Quality

Richard W. Sprott
Executive Director

DIVISION OF AIR QUALITY
Cheryl Heying
Director

JON M HUNTSMAN, JR
Governor

GARY HERBERT
Lieutenant Governor

DAQE-AN0105650014-08

May 7, 2008

Brian Harris
Geneva Rock Products
1565 West 400 North
Orem, Utah 84057

Dear Mr Harris:

Re: Approval Order: Modification of Approval Order DAQE-AN0565012-03 for an Aggregate, Asphalt, & Concrete Productions Increase, Equipment Additions and Operation Clarifications, Salt Lake County, CDS SM; NA; MAINT; HAPs, TITLE V MINOR Project Code: N010565-0014

The attached document is the Approval Order for the above-referenced project.

Future correspondence on this Approval Order should include the engineer's name as well as the DAQE number as shown on the upper right-hand corner of this letter. Please direct any questions you may have on this project to Mr Jon Black He may be reached at (801) 536-4047

Sincerely,

M. Cheryl Heying, Executive Secretary
Utah Air Quality Board

MCH:JB:kw

cc: Salt Lake Valley Health Department

Mike Owens, EPA Region VIII

STATE OF UTAH

Department of Environmental Quality

Division of Air Quality

APPROVAL ORDER: Modification of Approval Order DAQE-AN0565012-03 for an Aggregate, Asphalt, & Concrete Production Increase, Equipment Additions and Operation Clarifications

Prepared By: Jon Black, Engineer
(801) 536-4047
Email: jlblack@utah.gov

APPROVAL ORDER NUMBER

DAQE-AN0105650014-08

Date: May 7, 2008

Geneva Rock Products

Source Contact
Brian Harris
(801) 802-6954

M. Cheryl Heying
Executive Secretary
Utah Air Quality Board

Abstract

Geneva Rock Products has submitted two Notice of Intents (NOI's) requesting a modification to their current Approval Order DAQE-AN0565012-03. The modification shall consist of a proposed increase of aggregate, asphalt, & concrete production, miscellaneous equipment changes, and operating clarifications. The Utah Division of Air Quality (DAQ) combined the two NOI's, based on a 'common sense notion of a plant', and has concluded that all operations and activities at this location constitute one source. The Hansen-Lehi plant is located at 15547 South Minuteman Drive, Draper, Utah. This plant is located in Salt Lake County, which is a Non-attainment area of the National Ambient Air Quality Standards (NAAQS) for PM_{10}, and is a Maintenance area for O_3. New Source Performance Standards (NSPS) Subpart A, I, & OOO regulations apply to this source. National Emission Standards for Hazardous Air Pollutants (NESHAP) and Maximum Achievable Control Technology (MACT) regulations do not apply to this source. Title V of the 1990 Clean Air Act applies to this source.

Best Available Control Technology will be required for this source. Fugitive dust shall be controlled by wet suppression methods consisting of water sprays, water trucks, washing and sweeping of the haul road surfaces, and material moisture content requirements. BACT will also require the use of baghouses and bin-vent control devices for the asphalt and concrete plant exhaust points and cement, lime and flyash storage silos associated with these plants. An approved fugitive dust control plan will also be required for this site location.

The emissions, in tons per year, will change as follows: PM_{10} (+) 72.03, NO_x (+) 47.39, SO_2 (+) 11.42, CO (+) 71.12, VOC (+) 7.16, HAPs (+) 1.53. The changes in emissions will result in the following, in tons per year, potential to emit totals: PM_{10} = 128.86 (125.58 fugitive, 3.28 point source), NO_x = 65.58 (13.07 from fugitive blasting), SO_2 = 25.93, CO = 111.98 (51.52 from fugitive blasting), VOC = 20.94, HAPs = 4.42.

Under Utah Air Quality Rule R307-403-5: Offsets: PM_{10} Nonattainment Areas, any increase in combined PM_{10}, SO_2, and NO_x emissions, which exceed 50 tons/year shall obtain offsets at the ratio of 1.2:1 for the emission increase. The potential increase in emission of combined PM_{10}, SO_2, and NO_x emissions for Geneva Rock Products' proposal is 130.84 tons which requires a total of 157.01 emission offset credits with the 1.2:1 offset ratio applied. Also, potential emission rates of PM_{10} and CO do exceed the Major Source threshold of 100 tons/year. Because a large portion of this site consists of fugitive emission sources, the non-fugitive emission sources of this facility do not exceed 100 tons/year, and this site is designated as an aggregate plant, Geneva Rock products' Hansen-Lehi pit shall be considered a Title V Minor source (See UAC R307-101-2 Definition of Major Source). If at anytime the Geneva Rock Products' Hansen-Lehi plant goes through an emissions banking process, the appropriate emission offset credits shall be credited back to their proper State of Utah County Emissions Registry.

The project has been evaluated and found to be consistent with the requirements of the Utah Administrative Code Rule 307 (UAC R307). A public comment period was held in accordance with UAC R307-401-7 and a comment received was addressed and incorporated into this Approval Order (AO) document. This air quality AO authorizes the project with the following conditions, and failure to comply with any of the conditions may constitute a violation of this order.

General Conditions:

1 This AO applies to the following company:

Site Office	Corporate Office Location
Geneva Rock Products	Geneva Rock Products
15547 South Minuteman Drive	1565 West 400 North
Draper, Utah 84020	Orem, Utah 84057
Phone Number (801) 281-7950	(801) 802-6954
Fax Number (801) 281-7970	(801) 225-7830

The equipment listed in this AO shall be operated at the following location:

15547 South Minuteman Drive, Draper. Located on the east side of Interstate 15 (I-15) near the I-15 Exit 291, Salt Lake County

Universal Transverse Mercator (UTM) Coordinate System: UTM Datum NAD27
4,480.19 kilometers Northing, 423 09 kilometers Easting, Zone 12

2. All definitions, terms, abbreviations, and references used in this AO conform to those used in the Utah Administrative Code (UAC) Rule 307 (R307) and Title 40 of the Code of Federal Regulations (40 CFR) Unless noted otherwise, references cited in these AO conditions refer to those rules

3. The limits set forth in this AO shall not be exceeded without prior approval in accordance with R307-401.

4. Modifications to the equipment or processes approved by this AO that could affect the emissions covered by this AO must be reviewed and approved in accordance with R307-401.

5. All records referenced in this AO or in applicable NSPS standards, which are required to be kept by the owner/operator, shall be made available to the Executive Secretary or Executive Secretary's representative upon request Records shall be kept for the following minimum periods:

A.	Used oil consumption	Three years
B	Emission inventories	Five years from the due date of each emission statement or until the next inventory is due, whichever is longer.

C	NSPS records	All NSPS records for the on-site processing equipment listed in Condition # 9 shall be maintained on-site for a minimum of two years and shall be made available to the Executive Secretary or the Executive Secretary's representative upon request.
D.	All other records	Two years

6 Geneva Rock Products (GRP) shall install and operate the aggregate, asphalt & concrete batch plants and associated equipment and shall conduct its operations at the Hansen-Lehi plant in accordance with the terms and conditions of this AO, which was written pursuant to Geneva Rock Product's Notice of Intent submitted to the Division of Air Quality (DAQ) on August 31, 2007 and additional information submitted to the DAQ on September 19, 2007, September 25, 2007, November 27, 2007, January 2, 2008, January 7, 2008, January 8, 2008, January 21, 2008, January 22, 2008, February 15, 2008, February 28, 2008, March 3, 2008, March 4, 2008, March 12, 2008, and March 18, 2008.

7 The GRP Point of the Mountain location is a State Implementation Plan (SIP) source consisting of the Hansen-Lehi and Mount Jordan pits and is listed in Section IX, Part H, Page 12 of the Salt Lake County SIP

8 This AO shall replace the AO (DAQE-AN0565012-03) dated December 29, 2003

9 The approved installations shall consist of the following equipment or equivalent*:

Aggregate Plants[1]

A.	Crushing Equipment	Manufacturer Rating
	1) Crusher 1	Capacity: 385 tons per hour (tph)
	2) Crusher 2	Capacity: 335 tph
	3) Crusher 3	Capacity: 400 tph
	4) Crusher 4	Capacity: 380 tph
	5) Crusher 5	Capacity: 275 tph
	6) Crusher 6	Capacity: 620 tph
	7) Crusher 7	Capacity: 250 tph
	8) Portable Oversized Crusher	Capacity: 400 tph

B	Screening Equipment	Manufacturer Rating
	1) Screen 1	Capacity: 750 tph
	2) Screen 2	Capacity: 750 tph
	3) Screen 3	Capacity: 750 tph
	4) Screen 4	Capacity: 660 tph
	5) Screen 5	Capacity: 275 tph

1 - The equipment listed in Condition 9 A.1-8 and 9 B 1-13 is Subject to NSPS 40 CFR 60 Subpart OOO

6) Screen 6 Capacity: 920 tph
7) Screen 7 Capacity: 920 tph
8) Screen 8 Capacity: 920 tph
9) Screen 9 Capacity: 550 tph
10) Screen 10 Capacity: 550 tph
11) Screen 11 Capacity: 400 tph
12) Screen 12 Capacity: 400 tph
13) Screen 13 Capacity: 400 tph

Asphalt Plant[2]

C. One (1) hot mix asphalt plant

Rated Capacity: 500 tph

1) One (1) drum mixer

Fuel type: natural gas, liquid propane, #2 thru #6 fuel oil, & used oil

2) One (1) baghouse control device

3) Two (2) scalping screens Manufacturer Capacity: 550 tph each

4) Two (2) hot oil heaters Rating: 2 8 MMBTU/hr each

Concrete Plant

D One (1) central mix concrete batch plant (Unit Id- CCBP)

Rated Capacity: 280 cubic yard/hr
Control Device: baghouse

E One (1) portable truck mix concrete batch plant (Unit Id- PCBP)

Rated Capacity: 220 cubic yard/hr
Control Device: bin-vent

F One (1) hot water heater/boiler (Unit Id- WHB-CCBP) Rating: 9.9 MMBTU/hr

Fuel type: natural gas/propane

G One (1) hot water heater/boiler (Unit Id- WHB-PCBP), Rating: 2.9 MMBTU/hr

Fuel type: diesel

2 - The equipment listed in Condition 9 C and 9 C 1-2 is Subject to NSPS 40 CFR 60 Subpart I

Miscellaneous Equipment

H Miscellaneous processing equipment associated with all three plants**:

1) Grizzlies, feeders, splitters, traps, load bins, cold feed bins, conveyors, wet screens, fine material washers, coarse material washers, screws, cyclones, clarifiers, stackers, drilling/blasting equipment, material storage silos, volatile organic liquid storage tanks, etc

I Miscellaneous off highway vehicles associated with all plants**:

1) Front-end loaders, bulldozers, scrapers, drag-lines, track-hoes, haul trucks, water trucks, sweeper truck, fork-lifts, boom trucks, etc.

J. Diesel Generators

1)	Portable Generator #1	Fuel Type: Rating:	Diesel 817 hp
2)	Portable Generator #2	Fuel Type: Rating:	Diesel 665 hp
3)	Portable Generator #3	Fuel Type: Rating:	Diesel 120 hp
4)	Portable Generator #4	Fuel Type: Rating:	Diesel 65 hp
5)	Portable Generator #5	Fuel Type: Rating:	Diesel 65 hp
6)	Portable Generator #6	Fuel Type: Rating:	Diesel 400 hp

* Equivalency shall be determined by the Executive Secretary.

** This equipment is listed for informational purposes only but operation of this equipment shall meet the required opacity limitations of this AO.

10 GRP shall notify the Executive Secretary in writing when the installation of the equipment listed in Condition #9 has been completed and is operational, as an initial compliance inspection is required To ensure proper credit when notifying the Executive Secretary, send correspondence to the Executive Secretary, attn: Compliance Section.

If the construction and/or installation has not been completed within eighteen months from the date of this AO, the Executive Secretary shall be notified in writing on the status of the construction and/or installation At that time, the Executive Secretary shall require documentation of the continuous construction and/or installation of the operation and may revoke the AO in accordance with R307-401-18.

Limitations and Test Procedures

11. Emissions to the atmosphere at all times from the indicated emission point shall not exceed the following rates and concentrations:

Source: Asphalt Plant Baghouse

Pollutant	lb/hr	grains/dscf (68EF, 29 92 in Hg)
PM_{10}[3]	10 6	0 024

12. Stack testing to show compliance with the emission limitations stated in the above condition shall be performed as specified below:

A

Emissions Point	Pollutant	Testing Status	Test Frequency
Asphalt Plant Baghouse	PM_{10}	*	#

B Testing Status

* Initial compliance testing is required. The initial test date shall be performed as soon as possible and in no case later than 180 days after the start up of a new emission source or the granting of an AO to an existing emission source that is modified Compliance testing shall not be required for both virgin and recycle materials during the same testing period. Testing shall be performed for the product being produced during the time of testing.

\# Test every three years (or sooner if directed by the Executive Secretary). Tests may be required if the source is suspected to be in violation with other conditions of this AO Compliance testing shall not be required for both virgin and recycle materials during the same testing period Testing shall be performed for the product being produced during the time of testing

C Notification

The Executive Secretary shall be notified at least 30 days prior to conducting any required emission testing. A source test protocol shall be submitted to DAQ when the testing notification is submitted to the Executive Secretary

The source test protocol shall be approved by the Executive Secretary prior to performing the test. The source test protocol shall outline the proposed test

3 - This limitation is for processing both recycle (RAP) and virgin materials

methodologies, stack to be tested, and procedures to be used. A pretest conference shall be held, if directed by the Executive Secretary

D Sample Location

The emission point shall be designed to conform to the requirements of 40 CFR 60, Appendix A, Method 1, or other methods as approved by the Executive Secretary. An Occupational Safety and Health Administration (OSHA) or Mine Safety and Health Administration (MSHA) approved access shall be provided to the test location

E Volumetric Flow Rate

40 CFR 60, Appendix A, Method 2 or other testing methods approved by the Executive Secretary

F PM_{10}

For stacks in which no liquid drops are present, the following methods shall be used: 40 CFR 51, Appendix M, Methods 201, 201a, or other testing methods approved by the Executive Secretary. The back half condensibles shall also be tested using the method specified by the Executive Secretary

For stacks in which liquid drops are present, methods to eliminate the liquid drops should be explored If no reasonable method to eliminate the drops exists, then the following methods shall be used: 40 CFR 60, Appendix A, Method 5, 5a, 5d, or 5e as appropriate.

The back half condensibles shall not be used for compliance demonstration but shall be used for inventory purposes

G Calculations

To determine mass emission rates (lb/hr, etc.) the pollutant concentration as determined by the appropriate methods above shall be multiplied by the volumetric flow rate and any necessary conversion factors determined by the Executive Secretary, to give the results in the specified units of the emission limitation.

H New Source Operation

For a new source/emission point, the production rate during all compliance testing shall be no less than 90 percent of the production rate listed in this AO. If the maximum AO allowable production rate has not been achieved at the time of the test, the following procedure shall be followed:

1) Testing shall be at no less than 90 percent of the production rate achieved to date

2) If the test is passed, the new maximum allowable production rate shall be 110 percent of the tested achieved rate, but not more than the maximum allowable production rate. This new allowable maximum production rate shall remain in effect until successfully tested at a higher rate

3) The owner/operator shall request a higher production rate when necessary Testing at no less than 90 percent of the higher rate shall be conducted. A new maximum production rate (110 percent of the new rate) will then be allowed if the test is successful This process may be repeated until the maximum AO production rate is achieved

I Existing Source Operation

For an existing source/emission point, the production rate during all compliance testing shall be no less than 90 percent of the maximum production achieved in the previous three (3) years

In all cases, when testing for PM_{10} emissions during manufacture of recycle asphalt, recycle asphalt shall be introduced into the plant at a rate no less than 15 percent of the plant production (i e if the plant is producing 400 tons per hour of finished product, then asphalt to be recycled shall be introduced into the plant at a rate no less than 60 tons per hour)

13 Visible emissions from the following emission points shall not exceed the following values:

A. All crushers – 10 percent opacity
B. All screens – 10 percent opacity
C. All conveyor transfer points – 10 percent opacity
D All baghouses exhaust points (including asphalt plant) - 10 percent opacity
E All bin vent exhaust points – 10 percent opacity
F All diesel engines – 20 percent opacity
G All conveyor drop points – 15 percent opacity
H All other points – 20 percent opacity

Opacity observations of emissions from stationary sources shall be conducted according to 40 CFR 60, Appendix A, Method 9

For new sources that are subject to NSPS, initial opacity shall be determined by conducting observations in accordance with 40 CFR 60 11(b).

14. Visible fugitive dust emissions from haul road traffic and mobile equipment in operational areas shall not exceed 20 percent opacity. Visible emission determinations for traffic sources shall use procedures similar to Method 9, as described in the Fugitive Dust Control Plan (FDCP) for the site The normal requirement for observations to be made at 15-second intervals over a six-minute period, however, shall not apply.

When the Executive Secretary or Executive Secretary's representative is on site to observe opacity, six points, distributed along the length of the haul road or in the operational area,

shall be chosen by the Executive Secretary or the Executive Secretary's representative An opacity reading shall be made at each point when a vehicle passes the selected points Opacity readings shall be made ½ vehicle length or greater behind the vehicle and at approximately ½ the height of the vehicle or greater The accumulated six readings shall be averaged for the compliance value.

15 The following production and/or consumption limits shall not be exceeded:

Asphalt Production

A. 500 tons of asphalt produced per hour (virgin and recycle asphalt pavement (RAP) averaged over each operating day)

B 800,000 tons of asphalt production (virgin and RAP combined) per rolling 12-month period

Concrete Production

C 400,000 cubic yards of concrete produced per rolling 12-month period (Both CCBP and PCBP plants combined)

Aggregate Production

D 14,000,000 tons of aggregate production (including bank run material) per rolling 12-month period, where no more than 10,275,000 tons of aggregate is processed[4] per rolling 12-month period

E Bulldozing hours of operation

1) 24,000 hours of operation per rolling 12-month period for all bulldozers.

F. Diesel generators Horsepower-Hours (hp-hrs) operation

1) 1,926,600 total hp-hrs of operation per rolling 12-month period for the diesel generators with a power rating greater than 600 hp

2) 423,000 total hp-hrs of operation per rolling 12-month period for the diesel generators with a power rating less than 600 hp

G. 8,000 combined hours of operation for both 2 8 MMBTU/hr natural gas (or liquid propane) fired hot oil heaters per rolling 12-month period.

H. 1,500 hours of operation for the 9.9 MMBTU/hr natural gas (or liquid propane) fired hot water heater per rolling 12-month period.

4 - Processed is defined as passing through a crushing or screening unit prior to product usage or delivery.

I. 500 hours of operation for the 2 9 MMBTU/hr diesel fired hot water heater per rolling 12-month period.

J 44,000 tons of asphalt cement consumed per rolling 12-month period

K 90,500 gallons of gasoline throughput for the gasoline fuel storage tanks per rolling 12-month period.

L. 1,744,000 gallons of diesel fuel throughput for the diesel fuel storage tanks per rolling 12-month period.

M. 1,600,000 gallons of waste or burner fuel oil throughput for the storage tanks per rolling 12-month period.

Compliance with the hourly limitations shall be determined on a daily average (12 a m to 12 a.m.) Each day the owner/operator shall calculate a new hourly average based on the previous days production Hours of operation shall be determined by supervisor monitoring and maintaining of an operations log

Generator and bulldozer hours of operation shall be determined by hour meters installed on the equipment or other appropriate method as established by GRP

Records of consumption/production shall be kept for all periods when the plant is in operation Production/Consumption shall be determined by production scales, scale house records, vendor receipts, fuel delivery/usage records and/or any other appropriate mechanism The records of consumption/production shall be kept on a daily basis. To determine compliance with a rolling 12-month total, the owner/operator shall calculate a new 12-month total by the twentieth day of each month using data from the previous 12 months.

Roads and Fugitive Dust

16. GRP shall abide by a Fugitive Dust Control Plan (FDCP) acceptable to the Executive Secretary for control of all fugitive dust sources associated with the Hansen-Lehi plant GRP shall submit two copies of the FDCP to the Executive Secretary, attention: New Source Review Section and Compliance Section, for approval Subsequent updates to the FDCP shall be submitted and approved in accordance with the above stated requirements GRP shall abide by the most current FDCP approved by the Executive Secretary The haul road speed shall be posted

17 Control of surfaces subject to wind erosion shall be required and addressed within the FDCP.

18 A shroud shall be used to control fugitive emission associated with all air compression drilling operations.

19 All paved and unpaved roads and other unpaved operational areas that are used by mobile equipment shall be maintained to control fugitive dust in accordance with the FDCP. The opacity of any haul road, paved or unpaved, shall not exceed 20 percent during all times

the areas are in use. Records, as required by the FDCP, of control treatments shall be kept for all periods when the plant is in operation

20 Water sprays or chemical dust suppression sprays shall be installed at the following points to control fugitive emissions:

A All crusher inlet and outlet points
B. All dry screens
C All conveyor transfer and stacker drop points

The sprays shall operate whenever conditions warrant, as outlined in the FDCP, to meet the opacity requirements of this AO

21. The storage piles shall be watered to minimize generation of fugitive dust as conditions warrant, as outlined in the FDCP.

22. All displaced air from the asphalt and concrete plants lime, cement, & flyash silos shall pass through a fabric filter device before being vented to the atmosphere

23. The truck mix batch plant shall use a hood covering the truck inlet when loading the concrete trucks. The hood exhaust shall pass through a bin-vent prior to being vented to the atmosphere

24 GRP shall abide by all applicable requirements of R307-309 for PM_{10} non-attainment areas The full text of R307-309, Nonattainment and Maintenance Areas for PM_{10}: Fugitive Emissions and Fugitive Dust is included as Appendix A. However, to be in compliance, this source must operate in accordance with the most current version of R307-309

Fuels

25 The owner/operator shall use natural gas, liquid propane, fuel oil, #2 diesel or used oil as fuel in the asphalt plant Used oil shall comply with the conditions listed in Condition #28 below for energy recovery.

26 The owner/operator shall use natural gas, liquid propane, #1, #2, a combination of #1 and #2 diesel fuel, or gasoline in all other on-site equipment

27 The sulfur content of any fuel oil or diesel burned shall not exceed:

A 0 50 percent by weight for fuels used in the asphalt plant

B. 0.05 percent by weight for diesel fuels consumed in all other on-site equipment

The sulfur content shall be determined by ASTM Method D-4294-89 or approved equivalent Certification of fuel oil shall be either by GRP's own testing or test reports from the fuel oil marketer. Certification of other fuels shall be either by GRP's own testing or test reports from the fuel marketer

28. Equipment burning used oil for energy recovery shall comply with the following:

A The concentration/parameters of contaminants in any used oil fuel shall not exceed the following levels:

1)	Arsenic	5	ppm by weight
2)	Cadmium	2	ppm by weight
3)	Chromium	10	ppm by weight
4)	Lead	100	ppm by weight
5)	Total halogens	1,000	ppm by weight
6)	Sulfur	0 5	percent by weight

B The flash point of all used oil to be burned shall not be less than 100 °F

C. The owner/operator shall provide test certification for each shipment of used oil fuel received or generated on site. Certification shall be either by their own testing or test reports from the used oil fuel marketer. Records of used oil fuel consumption and the test reports shall be kept for all periods when the plant is in operation

D Used oil that does not exceed any of the listed contaminants listed in Condition 28 A above may be burned The owner/operator shall record the quantities of used oil burned on a daily basis.

E Any used oil fuel that contains more than 1000 ppm by weight of total halogens shall be considered a hazardous waste and shall not be burned in the asphalt burner or boiler. The oil shall be tested for halogen content by ASTM Method D-808-81, EPA Method 8240 or Method 8260 before used oil fuel is transferred to the asphalt plant fuel tank or boiler tank and burned

F. Sources utilizing used oil as a fuel shall comply with the State Division of Solid and Hazardous Waste in accordance with R315-15, UAC.

Federal Limitations and Requirements

29 . In addition to the requirements of this AO, all applicable provisions of 40 CFR 60, New Source Performance Standards (NSPS) Subpart A, 40 CFR 60.1 to 60.18 (General Provisions), Subpart I, 40 CFR 60.90 to 60.93 (Standards of Performance for Hot Mix Asphalt Facilities) and Subpart OOO, 40 CFR 60 670 to 60 676 (Standards of Performance for Nonmetallic Mineral Processing Plants) apply to the affected equipment located at the Geneva Rock Products Hansen-Lehi pit operation

To be in compliance, this source must operate in accordance with the most current version of 40 CFR 60 applicable to this source.

Monitoring - General Process

30. The asphalt plant baghouse shall control process exhaust from the asphalt drum mixer. This baghouse shall be sized to design parameters of at least 90,000 ACFM for the existing

conditions. All exhaust air from the drum mixer shall be routed through the baghouse before being vented to the atmosphere

31 The asphalt plant baghouse stack height shall be a minimum of 65 feet, as measured from the ground level

32. The following operating parameters shall be maintained within the indicated ranges:

A Asphalt plant baghouse

1) The pressure drop shall not be less than 2 0 inches of water column or more than 6 0 inches of water column.

The pressure drop shall be monitored with equipment located such that an inspector/operator can safely read the output any time The readings shall be accurate to within the following ranges:

B Pressure drop - Plus or minus 0.5 inches of water column

All instruments shall be calibrated according to the manufactures instructions at least once every 12 months. Continuous recording of the measurements of the monitoring device is not required However, records of one reading per operational day, shall be maintained

Records & Miscellaneous

33. At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any equipment approved under this AO, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions Determination of whether acceptable operating and maintenance procedures are being used will be based on the information available to the Executive Secretary which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source

34. All maintenance performed on equipment authorized by this AO, that has the potential to affect air emissions control, shall be recorded by GRP

35. The owner/operator shall comply with R307-150 Series Inventories, Testing and Monitoring

36 The owner/operator shall comply with R307-107 General Requirements: Unavoidable Breakdowns.

The Executive Secretary shall be notified in writing if the company is sold or changes its name

This AO in no way releases the owner or operator from any liability for compliance with all other applicable federal, state, and local regulations including R307.

A copy of the rules, regulations and/or attachments addressed in this AO may be obtained by contacting the Division of Air Quality. The Utah Administrative Code R307 rules used by DAQ, the Notice of Intent (NOI) guide, and other air quality documents and forms may also be obtained on the Internet at the following web site:

http://www.airquality.utah.gov/

The annual emissions estimations below include point source, fugitive emissions, fugitive dust, road dust, and loader/dozer tail pipe emissions. These emissions are for the purpose of determining the applicability of Prevention of Significant Deterioration, non-attainment area, Maintenance area, and Title V source requirements of the R307. They are not to be used for determining compliance.

The Potential to Emit (PTE) emissions for Geneva Rock Products – Hansen-Lehi Pit (the entire plant) are currently calculated at the following values:

	Pollutant	Tons/yr
A	PM_{10}	128.86
B	SO_2	25.93
C	NO_x	65.58
D	CO	111.98
E	VOC	20.94
F	HAPs	
	Ethyl Benzene	0.10
	Formaldehyde	1.24
	Toluene	1.16
	Xylene	0.08
	Total Misc HAPs	1.84
	Total HAPs	4.42

Approved By:

M. Cheryl Heying, Executive Secretary
Utah Air Quality Board

Appendix A

R307-309. Nonattainment and Maintenance Areas for PM10: Fugitive Emissions and Fugitive Dust.

R307-309-1 Purpose.

This rule establishes minimum work practices and emission standards for sources of fugitive emissions and fugitive dust listed in Section IX, Part H of the state implementation plan or located in PM10 nonattainment and maintenance areas to meet the reasonably available control measures for PM10 required in section 189(a)(1)(C) of the Act

R307-309-2. Definitions.

The following addition definition applies to R307-309:
"Material" means sand, gravel, soil, minerals other matter that may create fugitive dust

R307-309-3. Applicability.

(1) Applicability R307-309 applies to all sources of fugitive dust and fugitive emissions listed in Section IX Part H of the state implementation plan or located in a nonattainment or maintenance area for PM10 except as specified in (2) below
(2) Exemptions
(a) The provisions of R307-309 do not apply to agricultural or horticultural activities specified in 19-2-114 (1)-(3)
(b) Any activity subject to R307-307 is exempt from R307-309-7
(3) Compliance Schedule Any source located in a new nonattainment area for PM10 is subject to R307-309 180 days after the area is designated nonattainment by the Environmental Protection Agency. Provisions of R307-205 shall continue to apply to the owner or operator of a source during this transition period

R307-309-4. Fugitive Emissions

Fugitive emissions from any source shall not exceed 15% opacity Opacity observations of emissions from stationary sources shall be conducted in accordance with EPA Method 9 For intermittent sources and mobile sources, opacity observations shall use procedures similar to Method 9, but the requirement for observations to be made at 15-second intervals over a six-minute period shall not apply

R307-309-5. General Requirements for Fugitive Dust.

(1) Except as provided in (2) below, opacity caused by fugitive dust shall not exceed:
(a) 10% at the property boundary; and
(b) 20% on site
(2) Opacity in (1) above shall not apply when the wind speed exceeds 25 miles per hour and the owner or operator is taking appropriate actions to control fugitive dust
(a) If the source has a fugitive dust control plan approved by the executive secretary, control measures in the plan are considered appropriate
(b) Wind speed may be measured by a hand-held anemometer or equivalent device.
(3) Opacity observations of emissions from stationary sources shall be conducted in accordance with EPA Method 9 For intermittent sources and mobile sources, opacity observations shall use procedures similar to Method 9, but the requirement for observations to be made at 15-second intervals over a six-minute period shall not apply

R307-309-6. Fugitive Dust Control Plan.

(1) Any person owning or operating a new or existing source of fugitive dust including storage, hauling or handling operations, or engaging in clearing or leveling of land one-quarter acre or greater in size, earthmoving, excavation, or

movement of trucks or construction equipment over cleared land one-quarter acre or greater in size or access haul roads, or engaging in demolition activities including razing homes, buildings or other structures shall submit a plan to control fugitive dust to the executive secretary no later than 30 days after the source becomes subject to R307-309 The plan shall address fugitive dust control strategies for the following operations as applicable:

(a) Material Storage;
(b) Material handling and transfer;
(c) Material processing;
(d) Road ways and yard areas;
(e) Material loading and dumping;
(f) Hauling of materials;
(g) Drilling, blasting and pushing operations;
(h) Clearing and leveling;
(i) Earth moving and excavation;
(j) Exposed surfaces;
(k) Any other source of fugitive dust
(2) Strategies to control fugitive dust may include:
(a) Wetting or watering;
(b) Chemical stabilization;
(c) Enclosing or covering operations;
(d) Planting vegetative cover;
(e) Providing synthetic cover;
(f) Wind breaks;
(g) Reducing vehicular traffic;
(h) Reducing vehicular speed;
(i) Cleaning haul trucks before leaving loading area;
(j) Limiting pushing operations to wet seasons;
(k) Paving or cleaning road ways;
(l) Covering loads;
(m) Conveyor systems;
(n) Boots on drop points;
(o) Reducing the height of drop areas;
(p) Using dust collectors;
(q) Reducing production;
(r) Mulching;
(s) Limiting the number and power of blasts;
(t) Limiting blasts to non-windy days and wet seasons;
(u) Hydro drilling;
(v) Wetting materials before processing;
(w) Using a cattle guard before entering a paved road;
(x) Washing haul trucks before leaving the loading site;
(y) Terracing;
(z) Cleaning the materials that may create fugitive dust on a public or private paved road promptly; or
(aa) Preventing, to the maximum extent possible, material from being deposited onto any paved road other than a designated deposit site
(3) Each source shall comply with all provisions of the fugitive dust control plan as approved by the executive secretary

R307-309-7 Storage, Hauling and Handling of Aggregate Materials.

Any person owning, operating or maintaining a new or existing material storage, handling or hauling operation shall prevent to the maximum extent possible, material from being deposited onto any paved road other than a designated deposit site Any such person who deposits materials that may create fugitive dust on a public or private paved road shall clean the road promptly

R307-309-8. Construction and Demolition Activities.

Any person engaging in clearing or leveling of land with an area of one-quarter acre or more, earthmoving, excavating, construction, demolition, or moving trucks or construction equipment over cleared land or access haul roads shall prevent, to the maximum extent possible, material from being deposited onto any paved road other than a designated deposit site Any such person who deposits materials that may create fugitive dust on a public or private paved road shall clean the road promptly

R307-309-9. Roads.

(1) Any person responsible for construction or maintenance of any existing road or having right-of-way easement or possessing the right to use the same whose activities result in fugitive dust from the road shall minimize fugitive dust to the maximum extent possible Any such person who deposits materials that may create fugitive dust on a public or private paved road shall clean the road promptly

(2) Unpaved Roads Any person responsible for construction or maintenance of any new or existing unpaved road shall prevent, to the maximum extent possible, the deposit of material from the unpaved road onto any intersecting paved road during construction or maintenance Any person who deposits materials that may create fugitive dust on a public or private paved road shall clean the road promptly

R307-309-10. Mining Activities.

(1) Fugitive dust, construction activities, and roadways associated with mining activities are regulated under the provisions of R307-309-10 and not by R307-309-7, 8, 9, and 11

(2) Any person who owns or operates a mining operation shall minimize fugitive dust as an integral part of site preparation, mining activities, and reclamation operations

(3) The fugitive dust control measures to be used may include:

(a) periodic watering of unpaved roads,

(b) chemical stabilization of unpaved roads,

(c) paving of roads,

(d) prompt removal of coal, rock minerals, soil, and other dust-forming debris from roads and frequent scraping and compaction of unpaved roads to stabilize the road surface

(e) restricting the speed of vehicles in and around the mining operation,

(f) revegetating, mulching or otherwise stabilizing the surface of all areas adjoining roads that are a source of fugitive dust,

(g) restricting the travel of vehicles on other than established roads,

(h) enclosing, covering, watering, or otherwise treating loaded haul trucks and railroad cars, to minimize loss of material to wind and spillage,

(i) substitution of conveyor systems for haul trucks and covering of conveyor systems when conveyed loads are subject to wind erosion,

(j) minimizing the area of disturbed land,

(k) prompt revegetation of regraded lands,

(l) planting of special windbreak vegetation at critical points in the permit area,

(m) control of dust from drilling, using water sprays, hoods, dust collectors or other controls approved by the executive secretary

(n) restricting the areas to be blasted at any one time,

(o) reducing the period of time between initially disturbing the soil and revegetating or other surface stabilization,

(p) restricting fugitive dust at spoil and coal transfer and loading points,

(q) control of dust from storage piles through use of enclosures, covers, or stabilization and other equivalent methods or techniques as approved by the executive secretary, or

(r) other techniques as determined necessary by the executive secretary

R307-309-11. Tailings Piles and Ponds

(1) Fugitive dust, construction activities, and roadways associated with tailings piles and ponds are regulated under the provisions of R307-309-11 and not by R307-309-7, 8, 9, and 10

(2) Any person owning or operating an existing tailings operation where fugitive dust results from grading, excavating, depositing, or natural erosion or other causes in association with such operation shall take steps to minimize fugitive dust from such activities Such controls may include:

(a) watering.

(b) chemical stabilization,

(c) synthetic covers,

(d) vegetative covers,

(e) wind breaks,

(f) minimizing the area of disturbed tailings,

(g) restricting the speed of vehicles in and around the tailings operation, or

(h) other equivalent methods or techniques which may be approvable by the executive secretary